

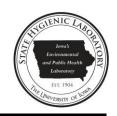
## Iowa Influenza Surveillance Network (IISN)

# Influenza-like Illness (ILI) and Other Respiratory Viruses

#### **Weekly Activity Report**

#### For the week ending October 18, 2014 - Week 42

All data presented in this report are provisional and may change as additional reports are received



Quick Stats  Percent of outpatient visits for ILI <sup>1</sup>	0.28 % (baseline 1.7%)			
Percent of influenza rapid test positive	2.0% (7/354)			
Percent of RSV rapid tests positive	2.3% (2/88)			
Percent school absence due to illness*	1.87%			
Number of schools with ≥10% absence due to illness	0			
Influenza-associated hospitalizations **	3/2,396 inpatients surveyed			
Influenza-associated pediatric mortality	0			
¹ ILI: Influenza-like Illness is defined as a fever of ≥100° F as well as cough and/or sore throat. *Percent school absence due to illness are reported through a weekly survey of lowa sentinel schools **Hospitalizations due to influenza are voluntarily reported through a weekly survey of lowa sentinel hospitals				

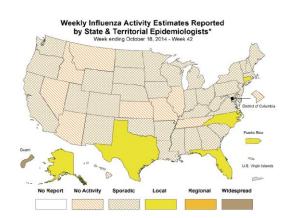
Iowa Influenza Geographic Spread <sup>2</sup>							
No Activity							
Sporadic							
Local							
Regional							
Widespread							
<sup>2</sup> This is based on CDC's activity estimates definition www.cdc.gov/flu/weekly/overview.htm							

#### Iowa statewide activity summary:

Influenza activity in Iowa remains low. For this reporting week, the State Hygienic Laboratory confirmed two Flu A (H3) cases, two Flu B and one Flu A (subtype pending). The proportion of outpatient visits due to influenza-like illness (ILI) was 0.28 percent which is well below the regional baseline. Three influenza-associated hospitalizations were reported from sentinel hospitals. No schools reported 10 percent or greater absenteeism due to illness. In addition, 10 cases of adenovirus, six cases of parainfluenza virus type 2, two cases of parainfluenza 3, one case of RSV, two cases of hMPV and 36 cases of rhinovirus/enterovirus were reported to IDPH.

#### National activity summary - (CDC):





During week 42 (October 12-18, 2014), influenza activity was low in the United States.

**Viral Surveillance**: Of 8,412 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories during week 42,403 (4.8%) were positive for influenza.

Novel Influenza A Virus: One human infection with a novel influenza A virus was reported.

**Pneumonia and Influenza Mortality**: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.

**Influenza-associated Pediatric Deaths**: Two influenza-associated pediatric deaths were reported, including one influenza-associated pediatric death that occurred during the 2013-2014 season.

**Outpatient Illness Surveillance**: The proportion of outpatient visits for influenza-like illness (ILI) was 1.4%, which is below the national baseline of 2.0%. One region reported ILI above their region-specific baseline level. Puerto Rico experienced high ILI activity; one state experienced low ILI activity; New York City and 49 states experienced minimal ILI activity and the District of Columbia had insufficient data.

**Geographic Spread of Influenza**: The geographic spread of influenza in Guam was reported as widespread; Puerto Rico and five states reported local activity; the U.S. Virgin Islands and 36 states reported sporadic activity; and the District of Columbia and nine states reported no influenza activity.

Detailed information can be found online at <a href="https://www.cdc.gov/flu/weekly/">www.cdc.gov/flu/weekly/</a>

#### International activity summary - (WHO):

Globally, influenza activity remained low, with the exception of some tropical countries in the Americas and some Pacific Islands. Detailed information can be found online at <a href="https://www.who.int/influenza/surveillance">www.who.int/influenza/surveillance</a> monitoring/updates/latest update GIP surveillance/en/.

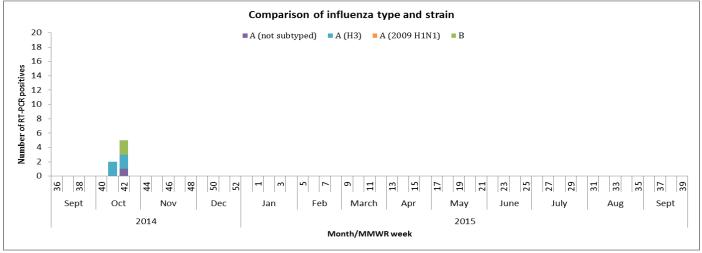
#### Laboratory surveillance program:

Only cases of Iowa residents are included

The State Hygienic Laboratory (SHL) is the primary lab for influenza testing and reporting in Iowa. SHL reports the number of tests performed and the type and strain of positive tests to the influenza surveillance network several times every week. In addition, SHL surveys clinical and reference labs for the number of rapid-antigen tests performed and number positive weekly. This report also includes the positive non-influenza virus tests reported from SHL, the Dunes Medical Laboratories at Mercy Medical Center in Sioux City, and Iowa Methodist Medical Center in Des Moines.

Table 1: Influenza viruses isolated by SHL by age group													
	CURRENT WEEK - MMWR WEEK 42						YEAR TO DATE (9/1/14 – PRESENT WEEK)						
	Flu A			1	Equiv/	Flu A							
Age	A (2009	A (H3)	A(H3N2)	Subtype		Indeter		A (2009	A (H3)	A(H3N2)	Subtype	Flu B	Neg
Group	H1N1)	A (115)	variant	Pending	Flu B	minate	Neg	H1N1)	A (115)	variant	Pending		
0-4	0(0%)	1(50%)	0(0%)	0(0%)	0(0%)	0(0%)	3(33%)	0(0%)	1(25%)	0(0%)	0(0%)	0(0%)	7(13%)
5-17	0(0%)	1(50%)	0(0%)	1(100%)	0(0%)	0(0%)	1(11%)	0(0%)	2(50%)	0(0%)	1(100%)	0(0%)	6(11%)
18-24	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	2(22%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	19(35%)
25-49	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	2(22%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	12(22%)
50-64	0(0%)	0(0%)	0(0%)	0(0%)	2(100%)	0(0%)	1(11%)	0(0%)	1(25%)	0(0%)	0(0%)	2(100%)	8(15%)
>64	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	3(5%)
Total	0	2	0	1	2	0	9	0	4	0	1	2	55
*Counts of	*Counts of three or less are sometimes suppressed to protect confidentiality. Note that counts may not add up to the total due to missing age information												

Comparison of influenza type and strain by MMWR/calendar week

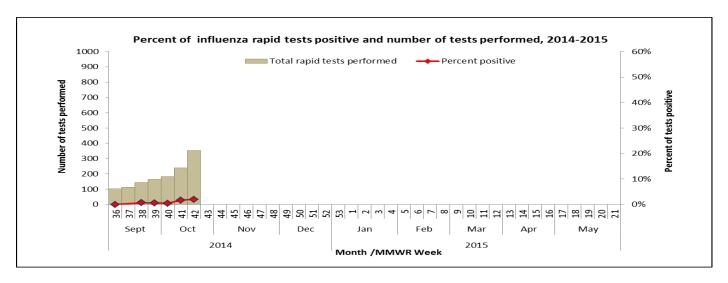


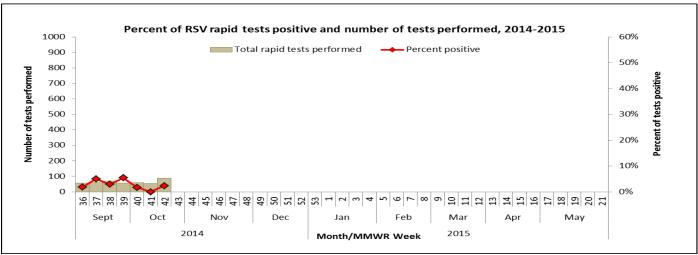
### Rapid influenza and RSV test surveillance:

The State Hygienic Laboratory (SHL) runs a weekly web-based survey program where laboratorians report the number of influenza and respiratory syncytial virus (RSV) rapid tests performed and the number of tests positive. This table includes only the number of patients tested for influenza or RSV at laboratory surveillance sites throughout the state. This table does not provide case counts.

DECION!*		RAPID	ANTIGEN INFLUEN	RAPID ANTIGEN RSV TESTS				
REGION*	Tested	Flu A	Flu B	Undefined	% Positive	Tested	Positive	% Positive
Region 1	57	0	0	0	3.3	14	1	7.1
Region 2	6	1	0	0	16.7	3	0	0.0
Region 3	29	0	1	0	3.4	7	0	0.0
Region 4	21	0	0	0	0.0	3	0	0.0
Region 5	32	0	0	0	0.0	6	1	16.7
Region 6	209	0	5	0	2.4	55	0	0.0
Total	354	1	6	0	2.0	88	2	2.3

\*Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster; Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright; Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury; Region 4- Adair Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Polagmoso, Gasty, Clarke, Deartur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Polagmoso, Davis, Des Molines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne; Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott.





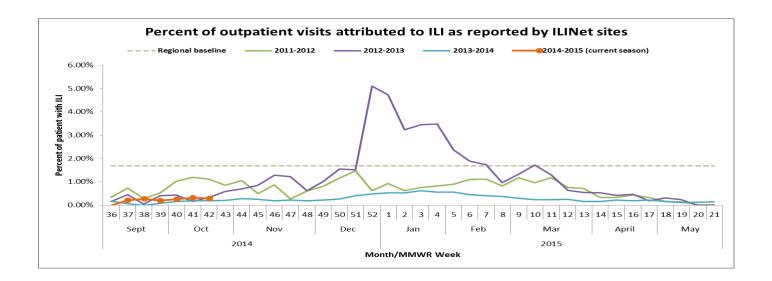
#### Non-influenza respiratory virus:

Viruses	CURRENT WEEK	CUMULATIVE (9/1/14 – PRESENT WEEK)
Adenovirus	10	25
Parainfluenza Virus Type 1	0	0
Parainfluenza Virus Type 2	6	25
Parainfluenza Virus Type 3	2	2
Parainfluenza Virus Type 4	0	1
Rhinovirus/Enterovirus	36	232
Respiratory syncytial virus (RSV)	1	2
Human metapneumovirus (hMPV)	2	2
Total	57	289

### Outpatient health care provider surveillance program (ILINet):

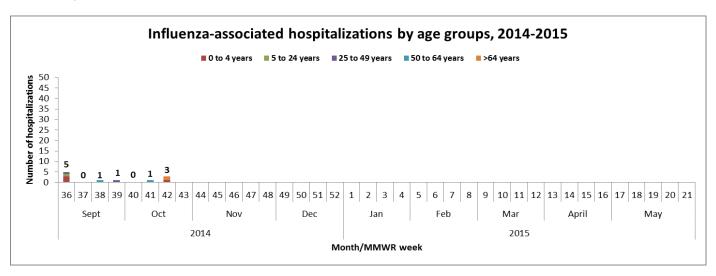
Outpatient health care providers who participate in the ILINet (a national influenza surveillance program) report the number of patients seen with influenza-like illness and the total number of patient visits each week. This system is a key part of lowa's influenza surveillance. Iowa health care providers interested in joining this surveillance program should contact Kemi Oni at 515-725-2136 or <a href="mailto:oluwakemi.oni@idph.iowa.gov">oluwakemi.oni@idph.iowa.gov</a> for more information.

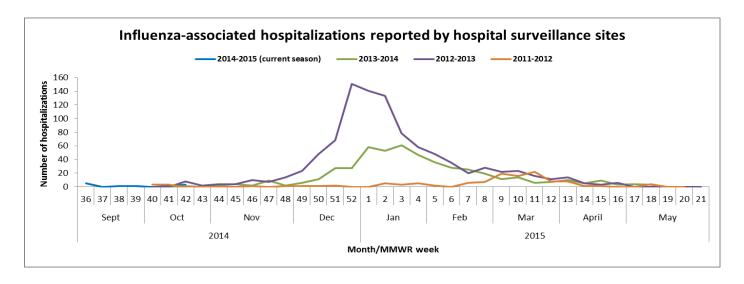
Table 4: Outpatient visits for influenza-like illness (ILI) – past 3 weeks							
Week	%ILI	Total ILI	Age 0-4	Age 5-24	Age 25-49	Age 50-64	Age >64
Week 40, ending Oct 4	0.25	82	22	52	4	3	1
Week 41, ending Oct 11	0.32	102	24	62	10	4	2
Week 42, ending Oct 18	0.28	95	21	49	14	4	7



#### **Influenza-associated hospitalizations:**

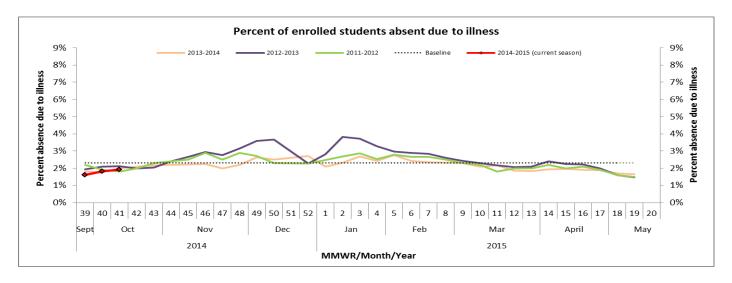
Sentinel hospitals that participate in IISN voluntarily track and report the number of influenza-associated hospitalizations and the total number of inpatients each week.





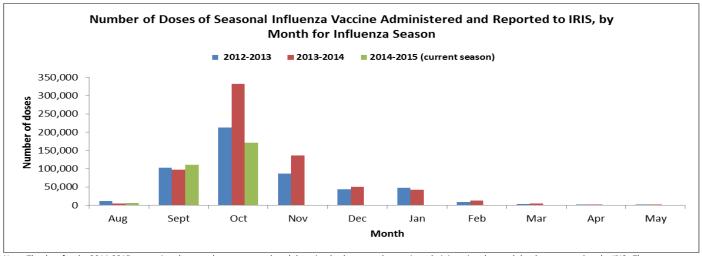
#### School surveillance program:

Sentinel schools that participate in IISN voluntarily track and report absence due to all illness (including non-influenza illnesses) and the total enrollment each week.



## Seasonal influenza vaccination:

Seasonal influenza vaccination data in iowa is based on doses reported to the Iowa Immunization Registry Information System (IRIS). IRIS is a confidential, computerized, population-based system that tracks immunization for children, adolescents and adults who are seen in a variety of public and private healthcare provider sites throught the state of Iowa. For more information on the immunization data, contact Kim Tichy, IRIS coordinator at 515-281-4288 or <a href="mailto:kimberly.tichy@idph.iowa.gov">kimberly.tichy@idph.iowa.gov</a>



Note: The data for the 2014-2015 season is only up to the current week and there is a lag between the vaccine administration date and the date reported to the IRIS. The current season's data will be adjusted as additional data is received.

#### Other resources:

#### Vaccine:

Influenza vaccine recommendation: http://www.idph.state.ia.us/lmmTB/lmmunization.aspx?prog=lmm&pg=Flu

#### Neighboring states' influenza inforamtion:

Illinois: http://www.idph.state.il.us/flu/surveillance.htm

Minnesota: http://www.health.state.mn.us/divs/idepc/diseases/flu/stats/index.html

Missouri: http://health.mo.gov/living/healthcondiseases/communicable/influenza/reports.php

South Dakota: <a href="http://doh.sd.gov/diseases/infectious/flu/">http://doh.sd.gov/diseases/infectious/flu/</a>

Wisconsin: www.dhs.wisconsin.gov/communicable/influenza/surveillance.htm

Google Flu Trends: http://www.google.org/flutrends/us/#US-IA